

CLAIMS:

1. A device (1) for projecting images (2) onto different projection surfaces (3, 4), as desired, having an electro-optical arrangement (34) for generating and emitting light on the basis of image data, and having an optical system (9) that includes a redirecting means (8') for directing the light, as desired, onto the projection surfaces (3, 4), wherein the optical system (9) has at least one movably mounted optical element (10A, 10B), which optical element (10A, 10B) can be moved into a beam path of the light, or out of the beam path of the light, depending on the projection surface (3, 4) selected for the light to be directed onto.
2. A device (1) as claimed in claim 1, wherein at least one redirecting mirror (8) is provided as the redirecting means (8'), which redirecting mirror at the same time forms the movably mounted optical element (10B) and which redirecting mirror is situated in a first position (B) in the beam path of the light when the light is directed onto a first projection surface (3) and which redirecting mirror is situated in a second position (C) out of the beam path of the light when the light is directed onto a second projection surface (4).
3. A device (1) as claimed in claim 2, wherein the redirecting mirror (8) is pivotably mounted in front of an exit opening (12) for the light and can be pivoted to a closed position (A) in which it covers the exit opening (12).
4. A device (1) as claimed in claim 2, wherein the redirecting mirror (8) has associated with it a motor (18) for repositioning the redirecting mirror.
5. A device (1) as claimed in claim 4, wherein the motor (18) is connected to electronic projection surface selecting means (27) to enable it to be controlled.
6. A device (1) as claimed in claim 1, wherein at least one movable image-forming lens (11) is provided as the movably arranged optical element (10A), which image-forming lens (11) is situated in a first position (P) out of the beam path of the light when the light is directed onto a first projection surface (3) and which image-forming lens (11) is

situated in a second, active position (Q) in the beam path of the light when the light is directed onto a second projection surface (4).

7. A device (1) as claimed in claim 6, wherein the image-forming lens (11) comprises at least two part-lenses.

8. A device (1) as claimed in claim 6, wherein the image-forming lens (11) is mounted on a displaceable slider (13).

9. A device (1) as claimed in claim 6, wherein the image-forming lens (11) has associated with it a drive motor (19) for repositioning said image-forming lens (11).

10. A device (1) as claimed in claim 9, wherein the motor (19) is connected to electronic projection surface selecting means (27) to enable it to be controlled.

11. A device (1) as claimed in claim 6, wherein the image-forming lens (11) is formed by a diverging lens to cause the beam of light to diverge for projection of the images onto a projection surface (4) provided at a comparatively short distance.

12. A device (1) as claimed in claim 11, wherein the image-forming lens (11) is formed by a Fresnel lens.

13. A device (1) as claimed in claim 2, wherein at least one movable image-forming lens (11) is provided as a further movably mounted optical element (10A), which image-forming lens (11) is situated in a first position (P) out of the beam path of the light when the light is directed onto the first projection surface (3) and which image-forming lens (11) is situated in a second, active position (Q) in the beam path of the light when the light is directed onto the second projection surface (4).

14. A device (1) as claimed in claim 13, wherein the redirecting mirror (8) and the image-forming lens (11) are coupled together for drive purposes.

15. A device (1) as claimed in claim 1, wherein the device (1) is in the form of a floor-mounted appliance for setting up in a room (5) for wall projection and ceiling projection.